



# TECHNOLOGY TRANSFER

## MISSION AND MECHANISMS

The fusion research institutions of the U.S. Department of Energy (DOE) possess skills, facilities, and technologies that represent a unique set of resources for enhancing the nation's competitiveness. In support of DOE's mission to transfer technology to industry, consumers, and other end users, these institutions provide access to their resources through a variety of mechanisms.

The development and application of advanced technology are of critical importance for U.S. competitiveness in world markets. The Department of Energy (DOE), which supports a wide range of research and development (R&D) activities through its world-class laboratories and through university programs, is working to transfer the results of these activities to industry, consumers, and other end users.

The fusion research institutions supported by DOE represent a particularly strong resource for technology transfer. The interdisciplinary teams

of experts assembled to attack the problems posed by magnetic fusion have generated innovative techniques, devices, and skills that are directly applicable to the solution of complicated problems in other areas, as described in this document, and the experts themselves are also a resource.

Access to these capabilities is available through a number of mechanisms, including

- collaborative projects with industry, including cooperative R&D agreements, or CRADAs,
- technology and software licensing,

- scientific user facilities,
- industrial interactions,
- technical personnel exchanges,
- reimbursable work for others,
- consulting arrangements,
- university interactions,
- contracting agreements, and
- technical information and software.

### Collaborative Projects with Industry

Increasing the number and scope of collaborative R&D projects with U.S. industry is one of the most important goals of current DOE technology transfer efforts. The CRADA is a relatively new tool for sharing laboratory facilities, technologies, and expertise with industry and universities. The terms of a CRADA are flexible, so that each agreement can be customized to provide optimum leveraging of resources and sharing of complementary capabilities, including funds, personnel, services, facilities, and equipment.

### Technology and Software Licensing

Each laboratory licenses its own patents, under terms and conditions tailored to the specific situation. Information on computer software, which is copyrighted and licensed by laboratory contractors, is available from the Energy Science and Technology Software Center in Oak Ridge, Tennessee. Technologies may be licensed from the laboratories on a fully exclusive basis or (more often) a nonexclusive basis. Licensing represents a relatively low-risk

